

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER <b>PC3-317</b> U.S. APPLICATION NO. (If known, use 37 CFR 1.52) <b>10/587323</b>
INTERNATIONAL APPLICATION NO. <b>PCT/US2005/003137</b>	INTERNATIONAL FILING DATE <b>28 January 2005</b>	PRIORITY DATE CLAIMED <b>30 January 2004</b>
TITLE OF INVENTION <b>Production Process and Systems, Compositions, Surfactants, Monomer Units, Metal Complexes, Phosphate Esters, Glycols, Aqueous Film Forming Foams and</b>		
APPLICANT(S) FOR DO/EO/US <b>Janet Boggs, Stephan M. Brandstadter, John Chien, Vimal Sharma. See Appendix A</b>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))                         <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).                         <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input checked="" type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))                         <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> <p><b>Items 11 to 20 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> </ol>		

IAP5 Rec'd PCT/PTO 26 JUL 2006

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (If known, use 37 CFR 1.5)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
<b>10/587323</b>		PCT/US2005/003137		PC3-317	
20. Other items or information: See Attached Appendix B					
The following fees have been submitted				CALCULATIONS PTO USE ONLY	
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))..... \$300				\$ 300.00	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))					
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0 All other situations..... \$200				\$ 200.00	
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))					
If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... \$400 All other situations..... \$500				\$ 100.00	
TOTAL OF 21, 22 and 23 =				\$600.00	
<input checked="" type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
165	- 100 = 65	/50 = 2	x \$250	\$ 500.00	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	44 - 20 =	24	x \$ 50	\$ 1200.00	
Independent claims	3 - 3 =	-0-	x \$ 200	\$ -0-	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$	
TOTAL OF ABOVE CALCULATIONS =				\$ 1200.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					
SUBTOTAL =				\$ 2300.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
TOTAL NATIONAL FEE =				\$ 2300.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
TOTAL FEES ENCLOSED =				\$ 2300.00	
				Amount to be refunded:	\$
				Amount to be charged	\$

10/587323

LAP5 Rec'd PCT/PTO 26 JUL 2005  
PTO-1390 (Rev. 07-2005)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.  
Approved for use through 3/31/2007. OMB 0651-0021  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE


- a. ☒ A check in the amount of \$ 2300.00 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 230925. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Wells St. John, P.S.  
601 W. First Ave., #1300  
Spokane, WA 99201

Phone: 509-624-4276  
Fax: 509-838-3424

  
SIGNATURE

Robert C. Hyta

NAME

46,791

REGISTRATION NUMBER

LV83280506

**10/587323**

**APPENDIX A P5 Rec'd PCT/PTO 26 JUL 2006**

**Additional Applicants:**

1. Bradley E. Edwards
2. Victoria Hendrick
3. Andrew Jackson
4. Gregory Leman
5. Bruno Ameduri
6. George K. Kostov

10/587323

## APPENDIX B

### Additional Enclosures:

1. PTO Return Receipt Postcard
2. Check for \$2300.00
3. Transmittal Letter to the U.S. Designated/Elected Office (DO/EO/US) Concerning a Submission under 35 U.S.C. 371 & duplicate copy of page 3 thereof
4. 4 pages of Formal Drawings (Figs. 1-8)
5. **Application as Re-Published**, including International Search Report (copy of the Published Application WO 2005/074593A2)
6. Request, as filed
7. International Search Report (PCT/ISA/210)
8. Written Opinion of the International Searching Authority (PCT/ISA/237)
9. Notification Concerning Submission/Transmittal of Priority Document (PCT/IB/304)
10. Letter Regarding Amended Request dated May 27, 2005, submitting replacement sheets 1, 2, 3, 5, 6, 7, 8, 8a, 8b, 8c, and 8d of original Request and replacement sheets 68-73, 91, and 106 of the originally filed Specification
11. Notification of the Recording of a Change (PCT/IB/306) dated June 27, 2005 (2 pages)
12. Letter Regarding Amended Request dated August 24, 2005, submitting replacement sheets 7a and 8e of the originally filed Request
13. Assignment (8 inventors)
14. Notice of Merger and Certificate of Ownership and Merger
15. Assignment (2 inventors)
16. Letter Regarding Amended Request dated February 10, 2006
17. Notification of the Recording of a Change (PCT/IB/306) dated April 6, 2006 (2 pages)
18. Form PTO/SB/08A

EV852835326

10 467323  
16 DEC 2005  
28 JUL 2005**PATENT COOPERATION TREATY**

---

INTERNATIONAL APPLICATION SERIAL NO. ....PCT/US05/03137  
FILING DATE .....28 January 2005 (28.01.2005)  
APPLICANTS ..... PCBU Services, Inc.  
AGENT'S FILE REFERENCE. .... PC3-159  
TITLE: Production Processes and Systems, Compositions, Surfactants, Monomer Units,  
Metal Complexes, Phosphate Esters, Glycols, Aqueous Film Forming Foams and Foam  
Stabilizers

---

**LETTER REGARDING AMENDED REQUEST**

To: Leslie BARRIOS  
The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

EV 832835326  
**By Facsimile: 011 41 22 338 89 70**

From: HYTA, Robert C.  
Wells, St. John, P.S.  
601 W. First Ave., Suite 1300  
Spokane, WA 99204-3828  
(509) 624-4276; FAX: (509) 838-3424

**REMARKS**

Applicant submits herewith replacement sheets 1, 2, 3, 5, 6, 7 and 8 of the originally filed Request. Sheet 1 has been amended to correct Inventor Boggs' address, to correct Applicant designations, and to amend Agent's fax number. Sheet 2 has been amended to correct Applicant designations. Sheet 3 has been amended to correct Applicant designations and to correct Inventor Jackson's address. Sheet 5 has been amended to include date of assignments, correct Inventor Jackson's address and to amend wording to meet the prescribed wording. Sheet 6 has been amended to incorporate date of assignments and to amend wording to the prescribed wording. Sheet 7 has been amended to include Inventor Boggs' signature and date. Sheet 8 has been amended as sheets 8a-d to include inventors' signatures and dates.

Please replace sheets 1, 2, 3, 5, 6, 7 and 8 of the original Request with the enclosed replacement sheets.

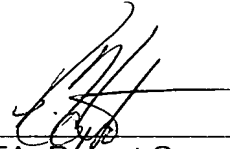
Applicant further submits replacement sheets 68-73, 91 and 106 of the originally filed specification. Sheets 68-73 and 106 have been amended for clerical purposes. Sheet 91 has been amended to correct an error in a depicted compound.

Please replace sheets 68-73, 91 and 106 of the originally filed specification with the enclosed replacement sheets.

Respectfully Submitted,

Date: 5/27/05

By:

  
\_\_\_\_\_  
HYTA, Robert C.  
Reg. No.: 46,791

## PATENT COOPERATION TREATY

INTERNATIONAL APPLICATION SERIAL NO. .... PCT/US05/03137  
INTERNATIONAL FILING DATE..... 28 January 2005 (28.01.2005)  
INTERNATIONAL PRIORITY DATE ..... 30 January 2004 (30.01.2004)  
APPLICANT ..... Great Lakes Chemical Corporation  
AGENT'S FILE REFERENCE. .... PC3-159  
TITLE: Production Processes and Systems, Compositions, Surfactants, Monomer Units,  
Metal Complexes, Phosphate Esters, Glycols, Aqueous Film Forming Foams and Foam  
Stabilizers

### LETTER REGARDING AMENDED REQUEST

**Via Facsimile: 011 41 22 740 14 35**

To: Carlos Roy – Gijsbertus Beijer  
The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

From: Robert C. Hyta  
Wells, St. John, P.S.  
601 W. First Ave., Suite 1300  
Spokane, WA 99204-3828 U.S.A.  
(509) 624-4276; FAX: (509) 838-3424

EV83283532

### REMARKS

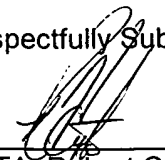
Applicant submits herewith replacement sheets 1, 3, 5, 6, 8e and a General Power of Attorney for Great Lakes Chemical Corporation to the originally filed Request. Sheet 1, Box No. II has been amended to reflect a new applicant by virtue of a merger between the original applicant, PCBU Services, Inc., and the new applicant, Great Lakes Chemical Corporation, dated November 15, 2005. Sheets 3 and 83 have been amended to correct the address of Inventor Ameduri. Sheet 5, Box No. VIII(ii) has been amended to reflect the new applicant's entitlement to apply for and be granted a patent and to add two additional assignors. Sheet 6, Box No. VIII(iii) has been amended to reflect the new applicant's entitlement to claim priority to earlier application, Serial No. 60/540,612, and to add two additional assignors.

Please replace sheets 1, 3, 5, 6 and 8e, of the original Request with the enclosed replacement sheets.

Respectfully Submitted,

Date: 2/10/06

By:

  
HYTA, Robert C.  
Reg. No.: 46,791



EV 33198510

IAP18 Rec'd PCT/PTO 26 JUL 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1587323

INTERNATIONAL APPLICATION SERIAL NO. .... PCT/US05/03137  
INTERNATIONAL FILING DATE..... January 28, 2005  
FIRST NAMED INVENTOR..... Janet Boggs, et al.  
APPLICANT ..... Great Lakes Chemical Corporation  
ATTORNEY DOCKET NO. .... PC3-159  
TITLE: Production Processes and Systems, Compositions, Surfactants, Monomer Units,  
Metal Complexes, Phosphate Esters, Glycols, Aqueous Film Forming Foams, and Foam  
Stabilizers

NOTICE OF MERGER

To: Assignment Recordation Services  
Director of the USPTO  
P.O. Box 1450  
Alexandria, VA 22313-1450

EV 832835323

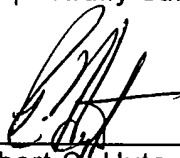
From: Robert C. Hyta  
Wells St. John P.S.  
601 W. First Avenue, Suite 1300  
Spokane, WA 99201-3828  
Tel. (509) 624-4276; Fax (509) 838-3424

HEREBY TAKE NOTICE that the above-captioned application, and any patents  
issued thereon, has been transferred to Great Lakes Chemical Corporation, a Delaware  
corporation, by reason of a merger of PCBU Services, Inc., effective as of November 15,  
2005, all as set forth in a Certificate of Ownership and Merger on file with the Secretary of  
State of Delaware, and as certified by the Secretary of State of Delaware.

Respectfully submitted,

Dated: 1/25/06

By:

  
Robert C. Hyta  
Reg. No. 46,791

Enc.: Copy of Certified Certificate of Ownership  
and Merger, dated November 15, 2005

10/587323  
IAP18 Rec'd PCT/PTO 26 JUL 2006

PATENT COOPERATION TREATY

INTERNATIONAL APPLICATION SERIAL NO. .... PCT/US2005/03137  
INTERNATIONAL FILING DATE ..... 28 January 2005 (28.01.2005)  
INTERNATIONAL PRIORITY DATE ..... 30 January 2004 (30.01.2004)  
APPLICANT ..... PCBU Services, Inc.  
AGENT'S FILE REFERENCE ..... PC3-159  
TITLE: Production Processes and Systems, Compositions, Surfactants, Monomer Units,  
Metal Complexes, Phosphate Esters, Glycols, Aqueous Film Forming Foams and Foam  
Stabilizers

LETTER REGARDING AMENDED REQUEST

Via Facsimile 011 41 22 338 89 70

To: Leslie Barrios  
The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

From: Robert C. Hyta  
Wells, St. John, P.S.  
601 W. First Ave., Suite 1300  
Spokane, WA 99204-3828  
(509) 624-4276; FAX: (509) 838-3424

EV832835326

REMARKS

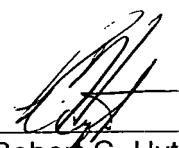
Applicant submits herewith additional sheets 7a and 8e to the originally filed Request. Sheet 7a has been added to include inventor Brandstadter's signature and date. Sheet 8e has been added to include inventor Ameduri's signature and date.

Please add sheets 7a and 8e to the original Request with the enclosed additional sheets.

Respectfully Submitted,

Date: 8/24/05

By: \_\_\_\_\_

  
Robert C. Hyta  
Reg. No.: 46,791